

REMARKS

I. Reconsideration of the rejection under 35USC 112, 2nd paragraph is respectfully requested.

Claim 20 has been amended to recite that "the degree of opening of the slot includes independently controlling the speed of the movement of the gate, and independently controlling the degree of opening of the slot by the gate to meter the granules falling from the hopper".

Claim 35 has been amended to recite speeds ranging from about 200 ft/min to about 1,000 ft/min. Support for such amendment is found in the specification at page 10, lines 25 – 32.

Such amendments overcome the rejection under 35 USC § 112, 2nd paragraph, and the Examiner is respectfully requested to withdraw this rejection.

II. Reconsideration of the rejection of the claims 1 – 40 under 35 USC §103(a) over the Bowen U.S. Pat. No. 3,101,281 (Bowen) reference in view of the White et al. (White et al.) U.S Pat. No. 6,360,638 reference.

Applicant appreciates the Examiner's further review and suggested wording to overcome the rejections of the claims. The present invention now recites a method of depositing granules onto a moving substrate where two independent variables are simultaneously, yet independently, controlled. The controlling step includes the independent control of the speed of the movement of the gate and the independent control of the degree of opening of the slot by the gate to meter the granules falling from the hopper.

In contrast, the Bowen reference only mentions the speed of the gate as it relates to the speed of the substrate. There is no teaching or suggestion in the Bowen reference of independent control of both the speed of the gate and the degree of opening of the gate. It was not until the present invention herein that such variables are independently controlled in order to provide the rapid and accurate dispensing of granules.

In contrast, the method of the present invention has a very fast mode of operation, as can be seen by the parameters set forth in claim 35 where the line speed operates between about 200 ft/min to about 1,000 ft/min. One advantage of the independent control of the speed of the gate and the degree of opening of such gate is the ability to achieve both highly accurate drop placement and high operating line speeds.

The White et al. reference, owned by the same assignee as herein, has a slide gate that operates as a discharge slot which is opened to a "full open" condition every time there is a blend drop. Thus, according to the White et al. reference, there is no mechanism to vary the flow to accommodate changes in the line speed of the moving sheet.

Also, the White et al. reference fails to teach or suggest the independent control of both the speed of the movement of the gate and independent control of the degree of opening of the slot by the gate to meter the granules falling from the hopper.

Therefore, the Bowen and White et al. references fail to teach or suggest the present invention.

In view of the above amendments and remarks, the Applicant has shown that the specification is in proper form, the claims are in proper form for allowance, and the invention, as defined in claims 1, 3-9, 11-18, 20 and 22 - 40, is patentably distinct. Accordingly, the Applicant respectfully requests allowance of all claims.